

1.2

- installation profile according to VDE 43 880
- multi-function time relays, 8 functions
- 6 switchable time ranges
- 18-264 V AC/DC zoom voltage
- approvals:



Technical Data:

Supply voltages:

Continuously variable voltage: 24 to 240 V AC/DC

Acceptable voltage variation 0.75 to 1.1 U_N

Frequency range 45-65 Hz
Duty cycle 100% IEC class 1c

Environmental conditions:

Permissible ambient temperature -25°C to +55°C
HVF climatic resistance to DIN 40040

Accuracy:

Repetition accuracy under constant condition
(as % of full range) $\leq 1\%$
Accuracy of adjustment $\leq 5\%$
Effect of temperature $\leq 0,1\%/^{\circ}\text{C}$
Reset time $\sim 100\text{ ms}$

Mechanical data/specifications:

Enclosure in self-extinguishing plastic
Type of protection IP 40
To meet the ÖVE-standards for household - applications require a 0,47 μF capacitor.

Type of connections:

Type X: Terminals up to 4 mm² with protection against accidental contact.
Type V: 11-pin plug-in base.

Dimensions and standards:

3X: 78,6 x 35 x 66 mm (h x b x d)
3V: 78,6 x 35 x 76 mm (h x b x d)
X: Mounting on DIN rails to DIN 46277/3
(European standard EN 50 0222)
Connection via terminals up to 4 mm² with protection against accidental contact. Type of protection IP20
Protection against contact to VDE 0106 and VBG 4
Terminal arrangement and connection markings to DIN 46 199

V: Mounting and connection via 11-pin screw or soldered plug.
Fixing via retaining clip BU 351. Pin arrangement and connection markings to IEC 67-1-18a

Output stage:

3X, 3V: 2 changeover

Max. switching voltage: 250 VAC/DC

Continuous current: max. 8 A
Switching capacity: 230 V AC cos ϕ 1 1500 VA

Contact life: 230 VAC 4 A resistive approx. $2 \cdot 10^5$ switching operations.
Mechanical life: approx. $20 \cdot 10^5$ switching operations.

Types:

CM3X
CM3V

Accessories:

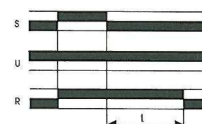
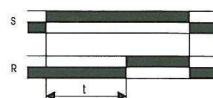
Mounting plate MP
Dip-switch cover DA3

Plug-in base TVE 11
Plug-in base TVE 12

E on-delay

R off-delay

Function diagram and function selection:



Description of function:

When input voltage U is applied, the set time t begins to run. When time t has elapsed, output relay R energises and remains on until the input voltage U is removed from the unit. If the input voltage U is removed from the unit before time t has elapsed, the time already elapsed is cancelled and re-starts from zero on the next cycle.

Input voltage U must be applied continuously to the unit. When control contact S is closed, the output relays R energise immediately. If control contact S is opened, the set time t begins to run.

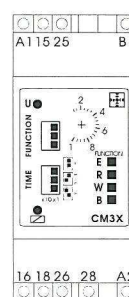
When time t has elapsed, output relay R1 returns to the off-position. If control contact S is closed again before time t expires, the time already elapsed is cancelled, and re-starts from zero on the next cycle.

Selection of time ranges:

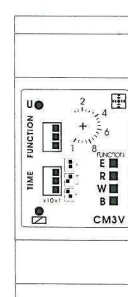
Time ranges:	1 sec	10 sec	1 min	10 min	1 h	10 h
switch setting:						

Front view:

CM3X



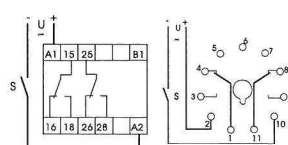
CM3V



Connection:

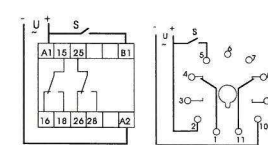
CM3X

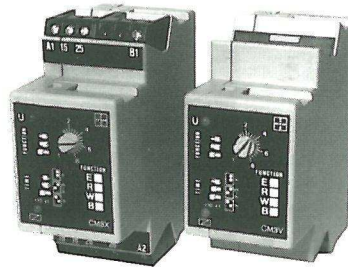
CM3V



CM3X

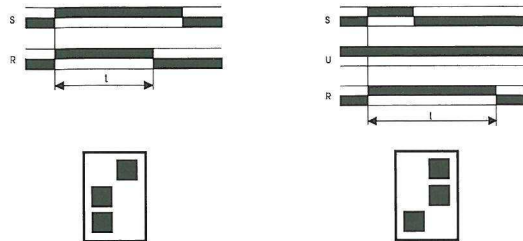
CM3V





eW(U) single shot leading edge eW(S) single shot leading edge pulse started

Function diagram and function selection:

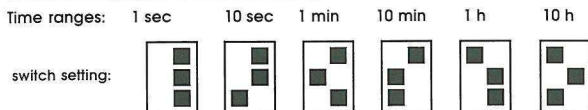


Description of function:

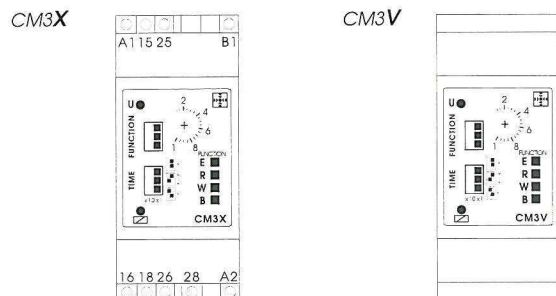
When input voltage U is applied output relay R energises immediately and set time t begins to run. When time t has elapsed, output relay R returns to the off-position. The input voltage U must be applied for longer than the set time t , for the function to be fully executed. This function can thus be used for pulse shortening. If the input voltage U is removed from the unit before time t has elapsed, the time already elapsed is cancelled and re-starts at zero on the next cycle.

The input voltage U must be applied continuously to the unit. When the control contact S is closed, the output relay R energises immediately and set time t begins to run. When time t has elapsed, output relay R returns to the off-position. The control contact S can be switched at will during time t . A new cycle can only be started when the current one is completed. If the input voltage U is removed from the unit before time t has elapsed, the relay is released and the time already elapsed is cancelled and re-starts from zero on the next cycle.

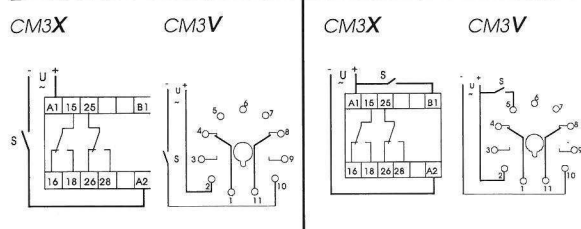
Selection of time ranges:



Front view:

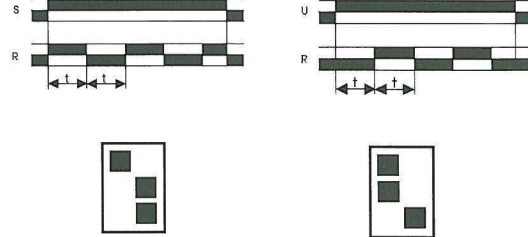


Connection:



Bi flasher pulse start Bp flasher pause start

Function diagram and function selection:

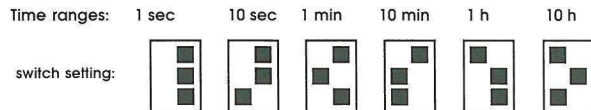


Description of function:

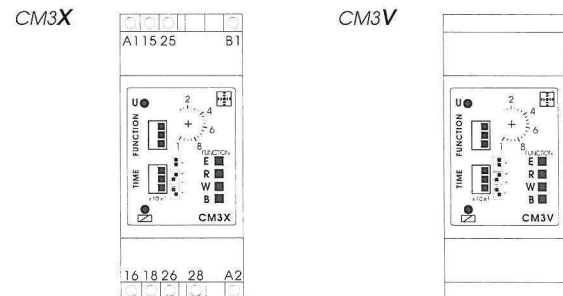
When the input voltage U is applied, the output relay R energises immediately and the set time t begins to run. Then the output relay R resets and remains in the off-position for time t . The output relay continues operating in the mark-space ratio of 1:1 for as long as the input voltage is applied to the unit.

When the input voltage U is applied, the set time t begins to run. Then the output relay R comes into operation and remains in the on-position for time t . The output relay R continues operating at a mark-space ratio of 1:1 for as long as the input voltage U is applied to the unit.

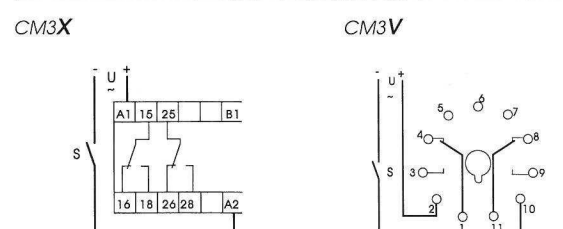
Selection of time ranges:



Front view:



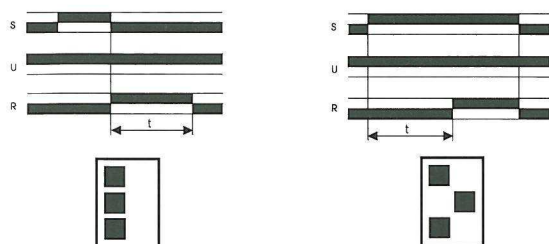
Connection:



aW single-shot trailing edge

E(S)on-delay with control contact

Function diagram and function selection:

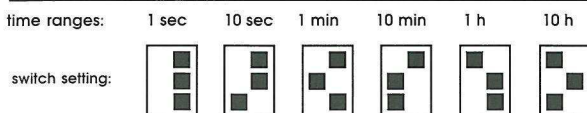


Description of function:

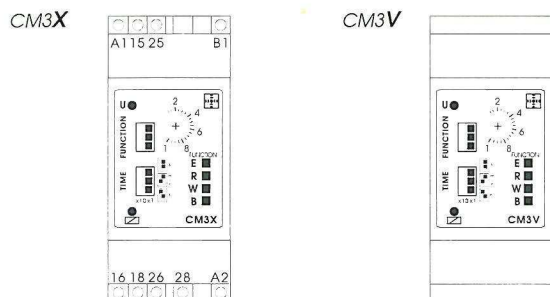
The input voltage U must be applied continuously to the unit. Closure of the control contact S has no effect on the unit. If the control contact S is opened, the output relay R comes into operation and the set time begins to run. The output relay R resets on expiry of time t. Until time t is fully expired, repeat opening of the control contact has no effect. This function can thus be used for extending an interruption.

The input voltage U must be applied continuously to the unit. When the control contact S is closed, the set time t begins to run. On expiry of time t the output relay energises. It remains in the on-position for as long as the control contact S is closed.

Selection of time ranges:



Front view:



Connection:

